

**Japanese Patent Laid-Open Publication No. 5-282696**

Publication Date      October 29, 1993  
Application No.      4-76913  
Application Date      March 31, 1992  
Applicant              TAIYO YUDEN CO., LTD.  
Inventor(s):           Toru FUJII and Takashi ISHIGURO

Excerpt from paragraphs 0024-0027

[0024]

According to the present embodiment, when the information to be recorded is input to the data input section 21, data of a predetermined time is accumulated in the buffer memory 22 before the information is recorded to the optical disk 1. The system controller 231 drives the spindle motor 232 to rotate the optical disk 1 at a predetermined rotating speed, and after detecting that a predetermined amount of data is accumulated in the buffer memory 222, outputs the data sequentially from the buffer memory 222 starting from the data accumulated first. The system controller 231 further starts tracking from the information recording start position by way of the tracking control circuit 237.

[0025]

The data output from the buffer memory 222 is thereby synchronized with a clock signal CK by the synchronous circuit 235, is output at a predetermined timing and converted to a recording signal by a recording correction circuit 236. A pulse laser beam is exited from the optical pick up 233 based on the recording signal and the

information is recorded onto the optical disk.

[0026]

If tracking is shifted for some reason such as, disturbance (vibration, mechanical impact), defect and the like when the information is being recorded to the optical disk 1, a tracking error signal ER is output from the tracking control circuit 237 to the system controller 231. The system controller 231, to which the tracking error signal ER is input, stops the output of the recording signal from the recording correction circuit 236 and stops the recording of information to the optical disk 1, and further, detects and stores the position at where the tracking is shifted by an absolute time information input from the signal processing circuit 234. The system controller 231 further stops data output from the buffer memory 222.

[0027]

Subsequently, the system controller 231 restarts tracking from the vicinity of the position where the tracking shifted (desirably within  $\pm 1$  EFM frame with respect to the position where the tracking shifted) through the tracking control circuit 237, and releases the output stop state of the recording signal in the recording correction circuit 236. Further, the system controller 231 outputs the accumulated data from the buffer memory 222 at a speed faster than before the tracking shifted, and increases the rotating speed of the spindle motor 232 in correspondence thereto. The information is thereby recorded at a higher speed than before the tracking is shifted.